

# ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1

5

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

|   |  |   |  |   |                          |
|---|--|---|--|---|--------------------------|
| 1. DATE OF ORDER<br>06/14/2011  |  | 2. CONTRACT NO. (If any)<br>EP-W-10-056           |  | 6. SHIP TO:<br>a. NAME OF CONSIGNEE<br>Sara Hartwell  |                          |
| 3. ORDER NO.<br>0040  |  | 4. REQUISITION/REFERENCE NO.<br>PR-OSWER-11-00396 |  |   |                          |
| 5. ISSUING OFFICE (Address correspondence to)<br>SRRPOD<br>US Environmental Protection Agency<br>Superfund/RCRA Regional Procurement Operations<br>1200 Pennsylvania Ave, NW<br>Washington DC 20460 |  |   |  | b. STREET ADDRESS<br>US Environmental Protection Agency<br>OSWER/ORCR<br>Potomac Yards North<br>2733 Crystal Drive  |                          |
|   |  |   |  | c. CITY<br>Arlington  | d. STATE<br>VA           |
|   |  |   |  | e. ZIP CODE<br>22202  |                          |
| 7. TO:<br>a. NAME OF CONTRACTOR<br>ICF INCORPORATED, L.L.C.   |  |   |  | f. SHIP VIA   |                          |
| b. COMPANY NAME   |  |   |  | 8. TYPE OF ORDER  |                          |
| c. STREET ADDRESS<br>9300 LEE HIGHWAY   |  |   |  | <input type="checkbox"/> a. PURCHASE<br>REFERENCE YOUR:<br><br>Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated. |                          |
| d. CITY<br>FAIRFAX  |  |   |  | e. STATE<br>VA  | f. ZIP CODE<br>220316050 |
| 9. ACCOUNTING AND APPROPRIATION DATA<br>See Schedule  |  |   |  | 10. REQUISITIONING OFFICE<br>ORCR   |                          |

|   |   |   |  |  |  |                                 |                    |  |
|---|---|---|--|--|--|---------------------------------|--------------------|--|
| 11. BUSINESS CLASSIFICATION (Check appropriate box(es)) |   |   |  |  |  | 12. F.O.B. POINT<br>Destination |                    |  |
| <input type="checkbox"/> a. SMALL                       | <input checked="" type="checkbox"/> b. OTHER THAN SMALL | <input type="checkbox"/> c. DISADVANTAGED           | <input type="checkbox"/> g. SERVICE-DISABLED VETERAN-OWNED |  |  |                                 |                    |  |
| <input type="checkbox"/> d. WOMEN-OWNED                 | <input type="checkbox"/> e. HUBZone                     | <input type="checkbox"/> f. EMERGING SMALL BUSINESS |  |  |  |                                 |                    |  |
| 13. PLACE OF  |   |   | 14. GOVERNMENT B/L NO.                                     |  | 15. DELIVER TO F.O.B. POINT<br>ON OR BEFORE (Date)<br>12/31/2011 |                                 | 16. DISCOUNT TERMS |  |
| a. INSPECTION<br>Destination                            |   | b. ACCEPTANCE<br>Destination                        |  |  |  |                                 |                    |  |

## 17. SCHEDULE (See reverse for Rejections)

| ITEM NO.<br>(a) | SUPPLIES OR SERVICES<br>(b)   | QUANTITY ORDERED<br>(c) | UNIT<br>(d) | UNIT PRICE<br>(e) | AMOUNT<br>(f) | QUANTITY ACCEPTED<br>(g) |
|-----------------|---|-------------------------|-------------|-------------------|---------------|--------------------------|
|                 | DUNS Number: 072648579<br>All terms and conditions of contract EP-W-10-056 are hereby incorporated by reference.<br><br>Continued ... |                         |             |                   |               |                          |

|                                     |   |                |                           |  |                   |  |                           |
|-------------------------------------|---|----------------|---------------------------|--|-------------------|--|---------------------------|
| SEE BILLING INSTRUCTIONS ON REVERSE | 18. SHIPPING POINT  |                | 19. GROSS SHIPPING WEIGHT |  | 20. INVOICE NO.   |  | 17(h) TOTAL (Cont. pages) |
|                                     | 21. MAIL INVOICE TO:  |                |                           |  |                   |  |                           |
|                                     | a. NAME<br>RTP Finance Center   |                |                           |  |                   |  | \$93,101.00               |
|                                     | b. STREET ADDRESS (or P.O. Box)<br>US Environmental Protection Agency<br>RTP-Finance Center (D143-02)<br>109 TW Alexander Drive |                |                           |  |                   |  | \$93,101.00               |
| c. CITY<br>Durham                   |   | d. STATE<br>NC | e. ZIP CODE<br>27711      |  | 17(i) GRAND TOTAL |  |                           |

22. UNITED STATES OF

AMERICA BY (Signature)

23. NAME (Typed)

Lynette Gallion  
TITLE: CONTRACTING/ORDERING OFFICER

**ORDER FOR SUPPLIES OR SERVICES**  
**SCHEDULE - CONTINUATION**

PAGE NO

2

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

|                             |                             |                   |
|-----------------------------|-----------------------------|-------------------|
| DATE OF ORDER<br>06/14/2011 | CONTRACT NO.<br>EP-W-10-056 | ORDER NO.<br>0040 |
|-----------------------------|-----------------------------|-------------------|

| ITEM NO.<br>(a) | SUPPLIES/SERVICES<br>(b)  | QUANTITY<br>ORDERED<br>(c) | UNIT<br>(d) | UNIT<br>PRICE<br>(e) | AMOUNT<br>(f) | QUANTITY<br>ACCEPTED<br>(g) |
|-----------------|---|----------------------------|-------------|----------------------|---------------|-----------------------------|
| 0001            | <p>The contractor shall perform services in accordance with the attached SOW and their proposal dated May 3, 2011.<br/>           TOPO: Sara Hartwell Max Expire Date: 12/31/2011<br/>           Admin Office:<br/>               SRRPOD<br/>               US Environmental Protection Agency<br/>               Superfund/RCRA Regional Procurement Operations<br/>               1200 Pennsylvania Ave, NW<br/>               Washington DC 20460<br/>           Period of Performance: 06/09/2010 to 12/31/2011</p> <p>Waste Reduction Model (WARM)</p> <p>Task Order Ceiling Amount</p> <p>Accounting Info:<br/>           11-12-B-31M-301DA1C-2585-1131MRP015-00<br/>           1 BFY: 11 EFY: 12 Fund: B Budget Org:<br/>           31M Program (PRC): 301DA1C Budget<br/>           (BOC): 2585 DCN - Line ID:<br/>           1131MRP015-001<br/>           Funding Flag: Complete<br/>           Funded: \$93,101.00</p> <p>The obligated amount of award: \$93,101.00.<br/>           The total for this award is shown in box 17(i).</p> |                            |             |                      | 93,101.00     |                             |

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$93,101.00

AUTHORIZED FOR LOCAL REPRODUCTION  
PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 348 (Rev. 4/2006)

Prescribed by GSA FAR (48 CFR) 53.213(f)

## **Task Order Statement of Work Support for the Waste Reduction Model (WARM)**

### **BACKGROUND**

The Resource Conservation and Sustainability Division (RCSD) was formed within the EPA's Office of Resource Conservation and Recovery to implement the national MSW strategy "The Solid Waste Dilemma: An Agenda for Action." RCSD is responsible for fostering integrated waste management (including waste prevention and recycling), developing State program approval procedures, assessing the status of State programs, and ensuring successful implementation of the entire MSW Program nationwide, in support of RCRA Subtitle D implementation.

To facilitate these activities,

Materials that enter the waste stream have energy impacts (and associated GHG emissions) at each stage of their life cycle. These life cycle stages include:

- acquisition of raw materials,
- processing raw materials,
- manufacture of products from processed materials,
- product use by consumers, and
- product disposal.

Waste reduction practices, such as recycling and reuse, reduce the demand for raw material and energy inputs to the manufacturing stage of the life cycle, thereby conserving energy and reducing GHG emissions. The energy savings and GHG emissions reductions associated with recycling are driven largely by the difference between manufacturing the material using virgin inputs and manufacturing the material using recycled inputs. Energy savings and GHG emissions reductions can also result from waste *disposal* practices, such as waste combustors and landfill gas to energy systems.

Since the energy implications of waste management practices for specific materials and products accrue throughout the life cycle, product-specific energy factors typically require a life-cycle analysis to quantify the benefits. The Waste Reduction Model (WARM) is an EPA tool that uses process energy and process non-energy GHG data from life cycle inventories to estimate the energy and GHG benefits of alternative waste disposal practices.

### **PURPOSE AND OBJECTIVES**

The purpose of this task order is to provide support to OSW's effort to quantify and articulate the important link between energy efficiency/climate change and management of materials, through:

- Analysis of new life cycle data for materials already addressed in WARM,
- Generation of GHG emissions factors from those analyses,
- Analysis of life cycle data for materials not yet addressed in WARM,
- Generation of GHG emissions factors for those new materials,
- Maintenance of WARM (both model and documentation), and
- Providing stakeholder support as it relates to the other activities of this task order.

## **SCOPE OF WORK**

The Contractor shall have demonstrated experience and expertise in the development and use of WARM and related tools (ReCon, iWARM); in sources, production and use of life cycle inventory data; and outreach and communication with users of WARM.

The work to be completed and the schedule of deliverables are included in the tasks and subtasks detailed below.

### **TASK 1. PROGRAM SPECIFIC SUPPORT - ORCR HEADQUARTERS (Task 1 of Contract-level SOW)**

The Contractor shall provide technical assistance to the Agency's program to promote the reduction, reuse and recycling of waste through maintenance and enhancement of the Waste Reduction Model (WARM). WARM uses process energy and process non-energy GHG data from life cycle inventories to estimate the energy and GHG benefits of alternative waste disposal practices. The Contractor shall update WARM with new and/or updated material-specific LCI data in for aluminum (both virgin and recycled), polylactic acid (PLA), and recycled high density polyethylene (HDPE), low density polyethylene (LDPE), and polyethylene terephthalate (PET).

Review of the aluminum LCI data was initiated under a previous contract (EPA Contract No.EP-W-07-003, WA 3-64). Responses from the Aluminum Association to questions about the data came in too late to complete the dataset before the end of the contract. The Contractor will complete the data review, and generate emissions factors suitable for use in WARM.

Review of the PLA LCI data was initiated under a previous contract (EPA Contract No.EP-W-07-003, WA 3-64). Responses from Natureworks to questions about the data came in too late to complete the dataset before the end of the contract. The Contractor will complete the data review, and generate emissions factors suitable for use in WARM.

The Contractor will review recent LCI data for 3 recycled resins (HDPE, LDPE, PET) generated by the American Chemistry Council (ACC) and the Association of Postconsumer Plastics Recyclers (APR). These data are available from the US Life Cycle Inventory database, operated by NREL. The Contractor shall review the data, identify any questions or anomalies, address those questions and anomalies with the generators of the data, and generate emissions factors suitable for use in WARM.

The Contractor will update WARM and the WARM documentation with the revised emissions factors.

The Contractor will prepare the annual WARM update to various factors in the model using current data sources: statistics on the carbon content of fuels, landfill methane generation distribution (by type of landfill), landfill gas recovery and flaring rates, and the non-biogenic carbon content of mixed MSW.

One update of WARM will be released, incorporating the new/revised emissions factors for Al, PLA, HDPE, LDPE, and PET, and the updated factors. Updated documentation will be posted simultaneously with the release of the updated model. The update is targeted for late December, 2011.

| <b>DELIVERABLES</b>   | <b>DUE DATES</b>                |
|---|---------------------------------|
| Revised Emissions Factors for Aluminum                          | December 1, 2011                |
| Revised Emissions Factors for PLA                               | December 1, 2011                |
| Revised Emissions Factors for HDPE, LDPE, PET                   | December 1, 2011                |
| Revised WARM documentation, incorporating new Emissions Factors | December 15, 2011               |
| Update of WARM to Internet                                      | December 31, 2011               |
| Posting updated WARM documentation to Internet                  | No later than December 31, 2011 |

## **TASK 2. COMMUNICATIONS AND OUTREACH SUPPORT**

**(Task 3 of Contract-level SOW)**

The Contractor shall provide communications and outreach support to stakeholders on use of WARM and interpretation of results. These stakeholder contacts will be forwarded to the Contractor by the TOCOR or her designee, and will include e-mail and telephone requests. In addition, the contractor shall (at the request of the EPA TOCOR or her designee) provide support to EPA staff in proper application of WARM.

Each monthly progress report shall list the stakeholder support provided that month, including name, topic, and answer provided.

For the purposes of cost estimation, assume that 24 stakeholder/staff requests are sent to the Contractor for support.

| <b>DELIVERABLES</b>  | <b>DUE DATES</b> |
|--|------------------|
| Monthly report including name, topic, and answer provided. | Monthly          |

|   |  |   |  |  |  |
|---|--|---|--|--|--|
| <b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>   |  | 1. CONTRACT ID CODE   |  | PAGE OF PAGES<br>1 5   |  |
| 2. AMENDMENT/MODIFICATION NO.<br>002  |  | 3. EFFECTIVE DATE<br>See Block 16C  |  | 4. REQUISITION/PURCHASE REQ. NO.<br>PR-OSWER-11-00708          |  |
| 5. PROJECT NO. (If applicable)  |  | 6. ISSUED BY<br>SRRPOD  |  | 7. ADMINISTERED BY (If other than Item 6)<br>SRRPOD            |  |
| US Environmental Protection Agency<br>Superfund/RCRA Regional Procurement<br>Operations<br>1200 Pennsylvania Ave, NW<br>Washington DC 20460             |  | US Environmental Protection Agency<br>Superfund/RCRA Regional Procurement<br>Operations<br>1200 Pennsylvania Ave, NW<br>Washington DC 20460 |  |  |  |
| 8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)<br><br>ICF INCORPORATED, L.L.C.<br>9300 LEE HIGHWAY<br>FAIRFAX VA 220316050 |  | (x)   |  | 9A. AMENDMENT OF SOLICITATION NO.                              |  |
|   |  |   |  | 9B. DATED (SEE ITEM 11)  |  |
|   |  | x   |  | 10A. MODIFICATION OF CONTRACT/ORDER NO.<br>EP-W-10-056<br>0040 |  |
|   |  |   |  | 10B. DATED (SEE ITEM 13)<br>06/14/2011                         |  |
| CODE 072648579  |  | FACILITY CODE   |  |  |  |

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) Net Increase: \$22,879.00  
See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

|           |   |
|-----------|---|
| CHECK ONE | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.  |
|           | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). |
|           | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:  |
| X         | D. OTHER (Specify type of modification and authority)<br>by mutual agreement of parties   |

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: 072648579

TOPO: Sara Hartwell Max Expire Date: 01/31/2012

The purpose of this modification is to incorporate the vendor's proposal dated September 6, 2011, which adds Task 3 to the existing statement of work (see attached pages 4-5). This modification also extends the end date of the period of performance by one month, from Dec. 31, 2011, to January 31, 2012. This modification establishes \$115,980 as the new ceiling for this order which the vendor exceeds at their own risk. The work herein is for non-severable services, and this modification also incorporates by reference both FAR 52.232-22 (Limitation of Funds) and FAR 52.232-20 (Limitation of Cost). All other terms and conditions remain unchanged.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

|   |                  |   |                  |
|---|------------------|---|------------------|
| 15A. NAME AND TITLE OF SIGNER (Type or print)                           |                  | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)<br>Rayna Brown |                  |
| 15B. CONTRACTOR/OFFEROR<br><br>(Signature of person authorized to sign) | 15C. DATE SIGNED | 16B. UNITED STATES OF AMERICA<br><br>(Signature of Contracting Officer)   | 16C. DATE SIGNED |

## CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED

EP-W-10-056/0040/002

PAGE OF

2

5

NAME OF OFFEROR OR CONTRACTOR

ICF INCORPORATED, L.L.C.

| ITEM NO.<br>(A) | SUPPLIES/SERVICES<br>(B)   | QUANTITY<br>(C) | UNIT<br>(D) | UNIT PRICE<br>(E) | AMOUNT<br>(F) |
|-----------------|--|-----------------|-------------|-------------------|---------------|
|                 | <p>LIST OF CHANGES:</p> <p>Reason for Modification : Supplemental Agreement<br/>for work within scope<br/>Period Of Performance End Date changed from<br/>31-DEC-11 to 31-JAN-12<br/>Total Amount for this Modification: \$22,879.00<br/>New Total Amount for this Version: \$115,980.00<br/>New Total Amount for this Award: \$115,980.00<br/>Obligated Amount for this Modification: \$22,879.00<br/>New Total Obligated Amount for this Award:<br/>\$115,980.00<br/>Contracting Officer changed<br/>from Eric Schermerhorn<br/><br/>to Rayna Brown<br/><br/>Maximum Potential Expiration Date changed to :<br/>01/31/2012<br/>CHANGES FOR LINE ITEM NUMBER: 1<br/>Total Amount changed<br/>from \$93,101.00 to \$115,980.00<br/>Obligated Amount for this modification: \$22,879.00<br/>Start Date changed from 15-APR-11 to 09-JUN-10<br/>End Date changed from 31-DEC-11 to 31-JAN-12<br/><br/>CHANGES FOR DELIVERY LOCATION: SRRPOD<br/>Amount changed from \$93,101.00 to \$115,980.00<br/><br/>NEW ACCOUNTING CODE ADDED:<br/>Account code:<br/>11-12-B-31M-301DA1C-2585-1131MRP024-001<br/>Beginning FiscalYear 11<br/>Ending Fiscal Year 12<br/>Fund (Appropriation) B<br/>Budget Organization 31M<br/>Quantity: 0<br/>Amount: \$22,879.00<br/>Percent: 19.72668<br/>Subject To Funding: N<br/>Payment Address:<br/>RTP Finance Center<br/>US Environmental Protection Agency<br/>RTP-Finance Center (D143-02)<br/>109 TW Alexander Drive<br/>Durham NC 27711<br/><br/>CHANGES FOR ACCOUNTING CODE:<br/>11-12-B-31M-301DA1C-2585-1131MRP015-001<br/>Percent changed from 100 to 80.27332<br/>Continued ...</p> |                 |             |                   |               |

## CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED

EP-W-10-056/0040/002

PAGE OF

3

5

NAME OF OFFEROR OR CONTRACTOR

ICF INCORPORATED, L.L.C.

| ITEM NO.<br>(A) | SUPPLIES/SERVICES<br>(B)   | QUANTITY<br>(C) | UNIT<br>(D) | UNIT PRICE<br>(E) | AMOUNT<br>(F) |
|-----------------|--|-----------------|-------------|-------------------|---------------|
| 0001            | <p>Payment:<br/>RTP Finance Center<br/>US Environmental Protection Agency<br/>RTP-Finance Center (D143-02)<br/>109 TW Alexander Drive<br/>Durham NC 27711</p> <p>FOB: Destination<br/>Period of Performance: 06/14/2011 to 01/31/2012</p> <p>Change Item 0001 to read as follows (amount shown is the total amount):</p> <p>Waste Reduction Model (WARM)</p> <p>Task Order Ceiling Amount</p> <p>Accounting Info:<br/>11-12-B-31M-301DA1C-2585-1131MRP015-001 BFY: 11<br/>EFY: 12 Fund: B Budget Org: 31M Program (PRC):<br/>301DA1C Budget (BOC): 2585 DCN - Line ID:<br/>1131MRP015-001<br/>Funding Flag: Complete<br/>Funded: \$0.00</p> <p>Accounting Info:<br/>11-12-B-31M-301DA1C-2585-1131MRP024-001 BFY: 11<br/>EFY: 12 Fund: B Budget Org: 31M Program (PRC):<br/>301DA1C Budget (BOC): 2585 DCN - Line ID:<br/>1131MRP024-001<br/>Funding Flag: Complete<br/>Funded: \$22,879.00</p> |                 |             |                   | 115,980.00    |



## **Task Order Statement of Work Support for the Waste Reduction Model (WARM)**

### **BACKGROUND**

The Resource Conservation and Sustainability Division (RCSD) was formed within the EPA's Office of Resource Conservation and Recovery to implement the national MSW strategy "The Solid Waste Dilemma: An Agenda for Action." RCSD is responsible for fostering integrated waste management (including waste prevention and recycling), developing State program approval procedures, assessing the status of State programs, and ensuring successful implementation of the entire MSW Program nationwide, in support of RCRA Subtitle D implementation.

To facilitate these activities,

Materials that enter the waste stream have energy impacts (and associated GHG emissions) at each stage of their life cycle. These life cycle stages include:

- acquisition of raw materials,
- processing raw materials,
- manufacture of products from processed materials,
- product use by consumers, and
- product disposal.

Waste reduction practices, such as recycling and reuse, reduce the demand for raw material and energy inputs to the manufacturing stage of the life cycle, thereby conserving energy and reducing GHG emissions. The energy savings and GHG emissions reductions associated with recycling are driven largely by the difference between manufacturing the material using virgin inputs and manufacturing the material using recycled inputs. Energy savings and GHG emissions reductions can also result from waste *disposal* practices, such as waste combustors and landfill gas to energy systems.

Since the energy implications of waste management practices for specific materials and products accrue throughout the life cycle, product-specific energy factors typically require a life-cycle analysis to quantify the benefits. The Waste Reduction Model (WARM) is an EPA tool that uses process energy and process non-energy GHG data from life cycle inventories to estimate the energy and GHG benefits of alternative waste disposal practices.

### **PURPOSE AND OBJECTIVES**

The purpose of this task order is to provide support to OSW's effort to quantify and articulate the important link between energy efficiency/climate change and management of materials, through:

- Analysis of new life cycle data for materials already addressed in WARM,
- Generation of GHG emissions factors from those analyses,
- Analysis of life cycle data for materials not yet addressed in WARM,
- Generation of GHG emissions factors for those new materials,
- Maintenance of WARM (both model and documentation), and
- Providing stakeholder support as it relates to the other activities of this task order.

## **SCOPE OF WORK.**

The Contractor shall have demonstrated experience and expertise in the development and use of WARM and related tools (ReCon, iWARM); in sources, production and use of life cycle inventory data; and outreach and communication with users of WARM.

The work to be completed and the schedule of deliverables are included in the tasks and subtasks detailed below.

### **TASK 3. PROGRAM- SPECIFIC SUPPORT – CARPET RECYCLING (Task 1 of Contract-level SOW)**

The Contractor shall provide technical assistance to the Agency's program to promote the reduction, reuse and recycling of end-of-life carpet through the Waste Reduction Model (WARM). WARM uses process energy and process non-energy GHG data from life cycle inventories to estimate the energy and GHG benefits of alternative material management practices. The Contractor shall update WARM with new LCI data for carpet (data to be provided by the EPA TOCOR, from Dr. Matthew Realff of Georgia Tech, with input from the Carpet America Recovery Effort (CARE).) The Contractor shall review the data, identify any questions or anomalies, address those questions and anomalies with the generators of the data, and generate emissions factors suitable for use in WARM.

The Contractor will update WARM and the WARM documentation with the revised emissions factors, including revisions to discussion of manufacturing and recycling processes.

The Contractor will include the revised documentation and emissions factors in the annual WARM update, previously tasked in this Task Order. Updated documentation will be posted simultaneously with the release of the updated model. The update is targeted for late December, 2011.

| <b>DELIVERABLES</b>   | <b>DUE DATES</b>  |
|---|-------------------|
| Revised Emissions Factors for Carpet                            | December 1, 2011  |
| Revised WARM documentation, incorporating new Emissions Factors | December 15, 2011 |

|   |  |  |  |   |  |
|---|--|--|--|---|--|
| <b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>   |  | 1. CONTRACT ID CODE  |  | PAGE OF PAGES<br>1 2                                |  |
| 2. AMENDMENT/MODIFICATION NO.<br>003  |  | 3. EFFECTIVE DATE<br>See Block 16C                             |  | 4. REQUISITION/PURCHASE REQ. NO.                    |  |
| 5. PROJECT NO. (If applicable)  |  | 6. ISSUED BY<br>SRRPOD   |  | 7. ADMINISTERED BY (If other than Item 6)<br>SRRPOD |  |
| 8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)<br>ICF INCORPORATED, L.L.C.<br>9300 LEE HIGHWAY<br>FAIRFAX VA 220316050 |  | 9A. AMENDMENT OF SOLICITATION NO.                              |  | 9B. DATED (SEE ITEM 11)                             |  |
| 9. CODE<br>072648579  |  | 10A. MODIFICATION OF CONTRACT/ORDER NO.<br>EP-W-10-056<br>0040 |  | 10B. DATED (SEE ITEM 13)<br>06/14/2011              |  |
| 10. FACILITY CODE   |  | 11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS      |  |   |  |

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

|           |   |
|-----------|---|
| CHECK ONE | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.  |
|           | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). |
|           | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:  |
| X         | D. OTHER (Specify type of modification and authority)<br>By mutual agreement of parties   |

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: 072648579

TOPO: Sara Hartwell Max Expire Date: 02/29/2012

The purpose of this bilateral modification is to 1) issue the revised deliverable schedule, 2) extend the period of performance, and 3) make administrative changes. All other terms and conditions remain unchanged.

LIST OF CHANGES:

Reason for Modification : Supplemental Agreement for work within scope

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

|   |                  |   |                  |
|---|------------------|---|------------------|
| 15A. NAME AND TITLE OF SIGNER (Type or print)                           |                  | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)<br>Rayna Brown |                  |
| 15B. CONTRACTOR/OFFEROR<br><br>(Signature of person authorized to sign) | 15C. DATE SIGNED | 16B. UNITED STATES OF AMERICA<br><br>(Signature of Contracting Officer)   | 16C. DATE SIGNED |

## CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED

EP-W-10-056/0040/003

PAGE OF

2

2

NAME OF OFFEROR OR CONTRACTOR

ICF INCORPORATED, L.L.C.

| ITEM NO.<br>(A) | SUPPLIES/SERVICES<br>(B)   | QUANTITY<br>(C) | UNIT<br>(D) | UNIT PRICE<br>(E) | AMOUNT<br>(F) |
|-----------------|--|-----------------|-------------|-------------------|---------------|
|                 | <p>1. DELIVERABLES DUE DATES--Task 1<br/>Revised WARM documentation, incorporating new<br/>Emissions Factors Revised Due Date: February 20,<br/>2012</p> <p>Update of WARM to Internet<br/>Revised Due Date: February 29, 2012</p> <p>Posting updated WARM documentation to Internet<br/>Revised Due Date: February 29, 2012</p> <p>Task 2<br/>Revised Emissions Factors for Carpet<br/>Revised Due Date: January 31, 2012</p> <p>2. Period Of Performance End Date changed from<br/>31-JAN-12 to 29-FEB-12.</p> <p>3. Contracting Officer Representative changed<br/>from Sara Hartwell to Tiffany Kollar.</p> <p>Payment:<br/>RTP Finance Center<br/>US Environmental Protection Agency<br/>RTP-Finance Center<br/>Mail Drop D143-02<br/>109 TW Alexander Drive<br/>Durham NC 27711</p> <p>Period of Performance: 06/14/2011 to 02/29/2012</p> |                 |             |                   |               |

|   |  |   |  |  |  |
|---|--|---|--|--|--|
| <b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>   |  | 1. CONTRACT ID CODE   |  | PAGE OF PAGES<br>1   2   |  |
| 2. AMENDMENT/MODIFICATION NO.<br>004  |  | 3. EFFECTIVE DATE<br>See Block 16C  |  | 4. REQUISITION/PURCHASE REQ. NO.                               |  |
| 5. PROJECT NO. (If applicable)  |  | 6. ISSUED BY<br>CODE<br>SRRPOD  |  | 7. ADMINISTERED BY (If other than Item 6)<br>CODE<br>SRRPOD    |  |
| SRRPOD<br>US Environmental Protection Agency<br>Superfund/RCRA Regional Procurement<br>Operations<br>1200 Pennsylvania Ave, NW<br>Washington DC 20460   |  | SRRPOD<br>US Environmental Protection Agency<br>Superfund/RCRA Regional Procurement<br>Operations<br>1200 Pennsylvania Ave, NW<br>Washington DC 20460 |  |  |  |
| 8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)<br><br>ICF INCORPORATED, L.L.C.<br>9300 LEE HIGHWAY<br>FAIRFAX VA 220316050 |  | (x)   |  | 9A. AMENDMENT OF SOLICITATION NO.                              |  |
|   |  |   |  | 9B. DATED (SEE ITEM 11)  |  |
|   |  | x   |  | 10A. MODIFICATION OF CONTRACT/ORDER NO.<br>EP-W-10-056<br>0040 |  |
|   |  |   |  | 10B. DATED (SEE ITEM 13)<br>06/14/2011                         |  |
| CODE 072648579  |  | FACILITY CODE   |  |  |  |

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

**12. ACCOUNTING AND APPROPRIATION DATA (If required)**

See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

|           |   |
|-----------|---|
| CHECK ONE | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.  |
|           | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). |
|           | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:  |
| X         | D. OTHER (Specify type of modification and authority)<br>By Mutual Agreement of the Parties   |

**E. IMPORTANT:** Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

DUNS Number: 072648579

TOPO: Sara Hartwell Max Expire Date: 03/13/2012

The purpose of this bilateral modification is to extend the period of performance for this order at no additional charge to the Government. The new period of performance end date will be March 13, 2012. All other terms and conditions remain unchanged.

**LIST OF CHANGES:**

Reason for Modification : Supplemental Agreement for work within scope

Period Of Performance End Date changed from 29-FEB-12 to 13-MAR-12

Maximum Potential Expiration Date changed to : 03/13/2012

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

|   |                  |   |                  |
|---|------------------|---|------------------|
| 15A. NAME AND TITLE OF SIGNER (Type or print)                           |                  | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)<br>Rayna Brown |                  |
| 15B. CONTRACTOR/OFFEROR<br><br>(Signature of person authorized to sign) | 15C. DATE SIGNED | 16B. UNITED STATES OF AMERICA<br><br>(Signature of Contracting Officer)   | 16C. DATE SIGNED |

|                           |   |      |    |
|---------------------------|---|------|----|
| <b>CONTINUATION SHEET</b> | REFERENCE NO. OF DOCUMENT BEING CONTINUED | PAGE | OF |
|                           | EP-W-10-056/0040/004                      | 2    | 2  |

NAME OF OFFEROR OR CONTRACTOR  
ICF INCORPORATED, L.L.C.

| ITEM NO.<br>(A) | SUPPLIES/SERVICES<br>(B)  | QUANTITY<br>(C) | UNIT<br>(D) | UNIT PRICE<br>(E) | AMOUNT<br>(F) |
|-----------------|---|-----------------|-------------|-------------------|---------------|
|                 | Payment:<br>RTP Finance Center<br>US Environmental Protection Agency<br>RTP-Finance Center<br>Mail Drop D143-02<br>109 TW Alexander Drive<br>Durham NC 27711<br>Period of Performance: 06/14/2011 to 03/13/2012 |                 |             |                   |               |

|   |  |  |  |   |  |
|---|--|--|--|---|--|
| <b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>   |  | 1. CONTRACT ID CODE  |  | PAGE OF PAGES<br>1 6                                |  |
| 2. AMENDMENT/MODIFICATION NO.<br>005  |  | 3. EFFECTIVE DATE<br>See Block 16C                             |  | 4. REQUISITION/PURCHASE REQ. NO.<br>See Schedule    |  |
| 5. PROJECT NO. (If applicable)  |  | 6. ISSUED BY<br>SRRPOD   |  | 7. ADMINISTERED BY (If other than Item 6)<br>SRRPOD |  |
| 8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)<br>ICF INCORPORATED, L.L.C.<br>9300 LEE HIGHWAY<br>FAIRFAX VA 220316050 |  | 9A. AMENDMENT OF SOLICITATION NO.                              |  | 9B. DATED (SEE ITEM 11)                             |  |
| 9C. DATED (SEE ITEM 11)   |  | 10A. MODIFICATION OF CONTRACT/ORDER NO.<br>EP-W-10-056<br>0040 |  | 10B. DATED (SEE ITEM 13)<br>06/14/2011              |  |
| CODE 072648579  |  | FACILITY CODE  |  |   |  |

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) Net Increase: \$50,000.00  
See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

|                |   |
|----------------|---|
| CHECK ONE<br>X | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.<br>FAR 52.243-3 Changes -- Time-and-Materials or Labor Hours         |
|                | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). |
|                | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:  |
|                | D. OTHER (Specify type of modification and authority)   |

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

DUNS Number: 072648579

TOPO: Tiffany Kollar Max Expire Date: 09/30/2012

The purpose of this change order is to issue the attached statement of work (pages 4-6). This modification also: 1) extends the period of performance. The new end date for this task order will be September 30, 2012. and 2) Obligates funds in the amount of \$50,000, thus increasing the ceiling of this task order from \$115,980 to \$165,980. The services under this task order are non-severable. All other terms and conditions remain unchanged.

The task order funding ceiling is \$165,980. Any expenditure above this amount is at the contractor's own risk.

LIST OF CHANGES:

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

|   |                  |   |                  |
|---|------------------|---|------------------|
| 15A. NAME AND TITLE OF SIGNER (Type or print)                           |                  | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)<br>Rayna Brown |                  |
| 15B. CONTRACTOR/OFFEROR<br><br>(Signature of person authorized to sign) | 15C. DATE SIGNED | 16B. UNITED STATES OF AMERICA<br><br>(Signature of Contracting Officer)   | 16C. DATE SIGNED |

## CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED  
EP-W-10-056/0040/005PAGE OF  
2 6NAME OF OFFEROR OR CONTRACTOR  
ICF INCORPORATED, L.L.C.

| ITEM NO.<br>(A) | SUPPLIES/SERVICES<br>(B)   | QUANTITY<br>(C) | UNIT<br>(D) | UNIT PRICE<br>(E) | AMOUNT<br>(F) |
|-----------------|--|-----------------|-------------|-------------------|---------------|
|                 | <p>Reason for Modification : Change Order</p> <p>1. Period Of Performance End Date changed from<br/>13-MAR-12 to 30-SEP-12<br/>Maximum Potential Expiration Date changed to :<br/>09/30/2012</p> <p>2. Obligated Amount for this Modification:<br/>\$50,000.00<br/>New Total Obligated Amount for this Award:<br/>\$165,980.00<br/>CHANGES FOR LINE ITEM NUMBER: 1<br/>Total Amount changed<br/>from \$115,980.00 to \$165,980.00<br/>Obligated Amount for this modification: \$50,000.00</p> <p>CHANGES FOR DELIVERY LOCATION: SRRPOD<br/>Amount changed from \$115,980.00 to \$165,980.00</p> <p>CHANGES FOR ACCOUNTING CODE:<br/>11-12-B-31M-301DA1C-2585-1131MRP015-001<br/>Percent changed from 80.27332 to 56.0917</p> <p>NEW ACCOUNTING CODE ADDED:<br/>Account code:<br/>12-13-B-31M-302DA2-2585-1231MRP005-001<br/>Beginning Fiscal Year 12<br/>Ending Fiscal Year 13<br/>Fund (Appropriation) B<br/>Budget Organization 31M<br/>Quantity: 0<br/>Amount: \$50,000.00<br/>Percent: 30.12411<br/>Subject To Funding: N<br/>Payment Address:<br/>RTP Finance Center<br/>US Environmental Protection Agency<br/>RTP-Finance Center (D143-02)<br/>109 TW Alexander Drive<br/>Durham NC 27711</p> <p>Payment:<br/>RTP Finance Center<br/>US Environmental Protection Agency<br/>RTP-Finance Center (D143-02)<br/>109 TW Alexander Drive<br/>Durham NC 27711<br/>FOB: Destination<br/>Period of Performance: 06/14/2011 to 09/30/2012</p> <p>Continued ...</p> |                 |             |                   |               |



|                           |   |      |    |
|---------------------------|---|------|----|
| <b>CONTINUATION SHEET</b> | REFERENCE NO. OF DOCUMENT BEING CONTINUED<br>EP-W-10-056/0040/005 | PAGE | OF |
|                           |   | 3    | 6  |

NAME OF OFFEROR OR CONTRACTOR  
ICF INCORPORATED, L.L.C.

| ITEM NO.<br>(A) | SUPPLIES/SERVICES<br>(B)   | QUANTITY<br>(C) | UNIT<br>(D) | UNIT PRICE<br>(E) | AMOUNT<br>(F) |
|-----------------|--|-----------------|-------------|-------------------|---------------|
| 0001            | <p>Change Item 0001 to read as follows (amount shown is the total amount):</p> <p>Waste Reduction Model (WARM)</p> <p>Task Order Ceiling Amount<br/>Requisition No: PR-OSWER-11-00396,<br/>PR-OSWER-11-00708, PR-OSWER-11-00708,<br/>PR-OSWER-12-00174</p> <p>Accounting Info:<br/>11-12-B-31M-301DA1C-2585-1131MRP015-001 BFY: 11<br/>EFY: 12 Fund: B Budget Org: 31M Program (PRC):<br/>301DA1C Budget (BOC): 2585 DCN - Line ID:<br/>1131MRP015-001<br/>Funding Flag: Partial<br/>Funded: \$0.00</p> <p>Accounting Info:<br/>11-12-B-31M-301DA1C-2585-1131MRP024-001 BFY: 11<br/>EFY: 12 Fund: B Budget Org: 31M Program (PRC):<br/>301DA1C Budget (BOC): 2585 DCN - Line ID:<br/>1131MRP024-001<br/>Funding Flag: Partial<br/>Funded: \$0.00</p> <p>Accounting Info:<br/>12-13-B-31M-302DA2-2585-1231MRP005-001 BFY: 12<br/>EFY: 13 Fund: B Budget Org: 31M Program (PRC):<br/>302DA2 Budget (BOC): 2585 DCN - Line ID:<br/>1231MRP005-001<br/>Funding Flag: Partial<br/>Funded: \$50,000.00</p> |                 |             |                   | 165,980.00    |

|   |  |   |  |   |  |
|---|--|---|--|---|--|
| <b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>   |  | 1. CONTRACT ID CODE   |  | PAGE OF PAGES<br>1   3  |  |
| 2. AMENDMENT/MODIFICATION NO.<br>006  |  | 3. EFFECTIVE DATE<br>See Block 16C                                  |  | 4. REQUISITION/PURCHASE REQ. NO.<br>PR-OSWER-12-00299   |  |
| 5. PROJECT NO. (If applicable)  |  | 6. ISSUED BY<br>SRRPOD  |  | 7. ADMINISTERED BY (If other than Item 6)<br>SRRPOD   |  |
| 8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)<br>ICF INCORPORATED, L.L.C.<br>9300 LEE HIGHWAY<br>FAIRFAX VA 220316050 |  | 9A. AMENDMENT OF SOLICITATION NO.                                   |  | 9B. DATED (SEE ITEM 11)   |  |
| 9C. MODIFICATION OF CONTRACT/ORDER NO.<br>EP-W-10-056<br>0040   |  | 9D. DATED (SEE ITEM 13)<br>06/14/2011                               |  | 10. ACCOUNTING AND APPROPRIATION DATA (If required)<br>See Schedule   |  |
| 11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS   |  | 12. ACCOUNTING AND APPROPRIATION DATA (If required)<br>See Schedule |  | 13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14. |  |

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)  
See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

|           |   |
|-----------|---|
| CHECK ONE | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.  |
|           | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). |
| X         | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:<br>By Mutual Agreement of the Parties  |
| X         | D. OTHER (Specify type of modification and authority)<br>FAR 52.232-22 Limitation of Funds  |

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: 072648579

TOPO: Tiffany Kollar Max Expire Date: 09/30/2012

The purpose of this bilateral modification is to:

- 1) approve the proposed equitable adjustment and incorporate as a supplemental agreement
- and 2) modify the obligated amount and ceilings.

The obligated amount is hereby increased by \$11,785, from \$165,980 to \$177,765. The funding ceiling is hereby \$177,765, which is subject to the Limitation of Funds clause.

In consideration of the modification agreed to herein as complete equitable adjustments for the Contractor's March 30, 2012 proposal for adjustment, the Contractor hereby releases the Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

|   |                  |   |                  |
|---|------------------|---|------------------|
| 15A. NAME AND TITLE OF SIGNER (Type or print)                           |                  | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)<br>Lynette Gallion |                  |
| 15B. CONTRACTOR/OFFEROR<br><br>(Signature of person authorized to sign) | 15C. DATE SIGNED | 16B. UNITED STATES OF AMERICA<br><br>(Signature of Contracting Officer)       | 16C. DATE SIGNED |

## CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED

EP-W-10-056/0040/006

PAGE OF

2

3

NAME OF OFFEROR OR CONTRACTOR

ICF INCORPORATED, L.L.C.

| ITEM NO.<br>(A) | SUPPLIES/SERVICES<br>(B)  | QUANTITY<br>(C) | UNIT<br>(D) | UNIT PRICE<br>(E) | AMOUNT<br>(F) |
|-----------------|---|-----------------|-------------|-------------------|---------------|
|                 | <p>Government from any and all liability under this contract for further equitable adjustments attributable to such facts or circumstances giving rise to the proposal for adjustment. .</p> <p>LIST OF CHANGES:</p> <p>Reason for Modification : Supplemental Agreement for work within scope</p> <p>New Total Amount for this Award: \$177,765.00</p> <p>Obligated Amount for this Modification: \$11,785.00</p> <p>Contracting Officer changed from Rayna Brown to Lynette Gallion.</p> <p>CHANGES FOR LINE ITEM NUMBER: 1</p> <p>Total Amount changed from \$165,980.00 to \$177,765.00</p> <p>Obligated Amount for this modification: \$11,785.00</p> <p>Incremental Funded Amount changed from \$0.00 to \$104,886.00</p> <p>CHANGES FOR DELIVERY LOCATION: SRRPOD</p> <p>Amount changed from \$165,980.00 to \$177,765.00</p> <p>NEW ACCOUNTING CODE ADDED:</p> <p>Account code:</p> <p>12-13-B-31M-302DA2-2585-1231MRP010-001</p> <p>Beginning Fiscal Year 12</p> <p>Ending Fiscal Year 13</p> <p>Fund (Appropriation) B</p> <p>Budget Organization 31M</p> <p>Quantity: 0</p> <p>Amount: \$11,785.00</p> <p>Percent: 6.62954</p> <p>Subject To Funding: N</p> <p>Payment Address:</p> <p>RTP Finance Center</p> <p>US Environmental Protection Agency</p> <p>RTP-Finance Center (D143-02)</p> <p>109 TW Alexander Drive</p> <p>Durham NC 27711</p> <p>CHANGES FOR ACCOUNTING CODE:</p> <p>11-12-B-31M-301DA1C-2585-1131MRP015-001</p> <p>Percent changed from 56.0917 to 52.37308</p> <p>Continued ...</p> |                 |             |                   |               |

## CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED  
EP-W-10-056/0040/006PAGE OF  
3 3NAME OF OFFEROR OR CONTRACTOR  
ICF INCORPORATED, L.L.C.

| ITEM NO.<br>(A) | SUPPLIES/SERVICES<br>(B)   | QUANTITY<br>(C) | UNIT<br>(D) | UNIT PRICE<br>(E) | AMOUNT<br>(F) |
|-----------------|--|-----------------|-------------|-------------------|---------------|
| 0001            | <p>Payment:</p> <p>RTP Finance Center<br/>US Environmental Protection Agency<br/>RTP-Finance Center (D143-02)<br/>109 TW Alexander Drive<br/>Durham NC 27711</p> <p>FOB: Destination<br/>Period of Performance: 06/14/2011 to 09/30/2012</p> <p>Change Item 0001 to read as follows (amount shown is the total amount):</p> <p>Waste Reduction Model (WARM)</p> <p>Task Order Ceiling Amount</p> <p>Accounting Info:<br/>11-12-B-31M-301DA1C-2585-1131MRP015-001 BFY: 11<br/>EFY: 12 Fund: B Budget Org: 31M Program (PRC):<br/>301DA1C Budget (BOC): 2585 DCN - Line ID:<br/>1131MRP015-001<br/>Funding Flag: Partial<br/>Funded: \$0.00<br/>Accounting Info:<br/>11-12-B-31M-301DA1C-2585-1131MRP024-001 BFY: 11<br/>EFY: 12 Fund: B Budget Org: 31M Program (PRC):<br/>301DA1C Budget (BOC): 2585 DCN - Line ID:<br/>1131MRP024-001<br/>Funding Flag: Partial<br/>Funded: \$0.00<br/>Accounting Info:<br/>12-13-B-31M-302DA2-2585-1231MRP005-001 BFY: 12<br/>EFY: 13 Fund: B Budget Org: 31M Program (PRC):<br/>302DA2 Budget (BOC): 2585 DCN - Line ID:<br/>1231MRP005-001<br/>Funding Flag: Partial<br/>Funded: \$0.00<br/>Accounting Info:<br/>12-13-B-31M-302DA2-2585-1231MRP010-001 BFY: 12<br/>EFY: 13 Fund: B Budget Org: 31M Program (PRC):<br/>302DA2 Budget (BOC): 2585 DCN - Line ID:<br/>1231MRP010-001<br/>Funding Flag: Partial<br/>Funded: \$11,785.00</p> |                 |             |                   | 177,765.00    |

|   |  |  |  |   |  |
|---|--|--|--|---|--|
| <b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>   |  | 1. CONTRACT ID CODE  |  | PAGE OF PAGES<br>1 3                                  |  |
| 2. AMENDMENT/MODIFICATION NO.<br>007  |  | 3. EFFECTIVE DATE<br>See Block 16C                             |  | 4. REQUISITION/PURCHASE REQ. NO.<br>PR-OSWER-12-00409 |  |
| 5. PROJECT NO. (If applicable)  |  | 6. ISSUED BY<br>SRRPOD   |  | 7. ADMINISTERED BY (If other than Item 6)<br>SRRPOD   |  |
| 8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)<br>ICF INCORPORATED, L.L.C.<br>9300 LEE HIGHWAY<br>FAIRFAX VA 220316050 |  | 9A. AMENDMENT OF SOLICITATION NO.                              |  | 9B. DATED (SEE ITEM 11)                               |  |
| 9C. DATED (SEE ITEM 11)   |  | 10A. MODIFICATION OF CONTRACT/ORDER NO.<br>EP-W-10-056<br>0040 |  | 10B. DATED (SEE ITEM 13)<br>06/14/2011                |  |
| CODE 072648579  |  | FACILITY CODE  |  |   |  |

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) Net Increase: \$38,425.00  
See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

|           |   |
|-----------|---|
| CHECK ONE | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.  |
|           | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). |
|           | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:  |
| X         | D. OTHER (Specify type of modification and authority)<br>FAR 52.232-20 Limitation of Cost   |

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

DUNS Number: 072648579

TOPO: Tiffany Kollar Max Expire Date: 09/30/2012

The purpose of this modification is to approve the vendor's proposal dated June 27, 2012. This modification also obligates funds in the amount of \$38,425, increasing the total value of this award from \$177,765 to \$216,190. All other terms and conditions remain unchanged.

**LIST OF CHANGES:**

Reason for Modification : Change Order

Total Amount for this Modification: \$38,425.00

New Total Amount for this Version: \$216,190.00

New Total Amount for this Award: \$216,190.00

Obligated Amount for this Modification: \$38,425.00

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

|   |                  |   |                  |
|---|------------------|---|------------------|
| 15A. NAME AND TITLE OF SIGNER (Type or print)                           |                  | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)<br>Lynette Gallion |                  |
| 15B. CONTRACTOR/OFFEROR<br><br>(Signature of person authorized to sign) | 15C. DATE SIGNED | 16B. UNITED STATES OF AMERICA<br><br>(Signature of Contracting Officer)       | 16C. DATE SIGNED |

## CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED

EP-W-10-056/0040/007

PAGE OF

2

3

NAME OF OFFEROR OR CONTRACTOR

ICF INCORPORATED, L.L.C.

| ITEM NO.<br>(A) | SUPPLIES/SERVICES<br>(B)  | QUANTITY<br>(C) | UNIT<br>(D) | UNIT PRICE<br>(E) | AMOUNT<br>(F) |
|-----------------|---|-----------------|-------------|-------------------|---------------|
|                 | <p>New Total Obligated Amount for this Award:<br/>\$216,190.00</p> <p>CHANGES FOR LINE ITEM NUMBER: 1<br/>Total Amount changed<br/>from \$177,765.00 to \$216,190.00<br/>Obligated Amount for this modification: \$38,425.00</p> <p>CHANGES FOR DELIVERY LOCATION: SRRPOD<br/>Amount changed from \$177,765.00 to \$216,190.00</p> <p>NEW ACCOUNTING CODE ADDED:<br/>Account code:<br/>12-13-B-31M-302DA1-2585-1231MRP016-001<br/>Beginning Fiscal Year 12<br/>Ending Fiscal Year 13<br/>Fund (Appropriation) B<br/>Budget Organization 31M<br/>Quantity: 0<br/>Amount: \$38,425.00<br/>Percent: 21.61562<br/>Subject To Funding: N<br/>Payment Address:<br/>RTP Finance Center<br/>US Environmental Protection Agency<br/>RTP-Finance Center (D143-02)<br/>109 TW Alexander Drive<br/>Durham NC 27711</p> <p>Payment:<br/>RTP Finance Center<br/>US Environmental Protection Agency<br/>RTP-Finance Center (D143-02)<br/>109 TW Alexander Drive<br/>Durham NC 27711</p> <p>FOB: Destination<br/>Period of Performance: 06/14/2011 to 09/30/2012</p> <p>Change Item 0001 to read as follows (amount shown<br/>is the total amount):</p> <p>Waste Reduction Model (WARM)</p> |                 |             |                   |               |
| 0001            | <p>Task Order Ceiling Amount</p> <p>Accounting Info:<br/>11-12-B-31M-301DA1C-2585-1131MRP015-001 BFY: 11<br/>EFY: 12 Fund: B Budget Org: 31M Program (PRC):<br/>Continued ...</p>   |                 |             |                   | 216,190.00    |

## CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED  
EP-W-10-056/0040/007PAGE OF  
3 3NAME OF OFFEROR OR CONTRACTOR  
ICF INCORPORATED, L.L.C.

| ITEM NO.<br>(A) | SUPPLIES/SERVICES<br>(B)  | QUANTITY<br>(C) | UNIT<br>(D) | UNIT PRICE<br>(E) | AMOUNT<br>(F) |
|-----------------|---|-----------------|-------------|-------------------|---------------|
|                 | 301DA1C Budget (BOC): 2585 DCN - Line ID:<br>1131MRP015-001<br>Funding Flag: Partial<br>Funded: \$0.00<br>Accounting Info:<br>11-12-B-31M-301DA1C-2585-1131MRP024-001 BFY: 11<br>EFY: 12 Fund: B Budget Org: 31M Program (PRC):<br>301DA1C Budget (BOC): 2585 DCN - Line ID:<br>1131MRP024-001<br>Funding Flag: Partial<br>Funded: \$0.00<br>Accounting Info:<br>12-13-B-31M-302DA2-2585-1231MRP005-001 BFY: 12<br>EFY: 13 Fund: B Budget Org: 31M Program (PRC):<br>302DA2 Budget (BOC): 2585 DCN - Line ID:<br>1231MRP005-001<br>Funding Flag: Partial<br>Funded: \$0.00<br>Accounting Info:<br>12-13-B-31M-302DA2-2585-1231MRP010-001 BFY: 12<br>EFY: 13 Fund: B Budget Org: 31M Program (PRC):<br>302DA2 Budget (BOC): 2585 DCN - Line ID:<br>1231MRP010-001<br>Funding Flag: Partial<br>Funded: \$0.00<br>Accounting Info:<br>12-13-B-31M-302DA1-2585-1231MRP016-001 BFY: 12<br>EFY: 13 Fund: B Budget Org: 31M Program (PRC):<br>302DA1 Budget (BOC): 2585 DCN - Line ID:<br>1231MRP016-001<br>Funding Flag: Partial<br>Funded: \$38,425.00 |                 |             |                   |               |

|   |  |  |  |   |  |
|---|--|--|--|---|--|
| <b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>   |  | 1. CONTRACT ID CODE  |  | PAGE OF PAGES<br>1   5                              |  |
| 2. AMENDMENT/MODIFICATION NO.<br>008  |  | 3. EFFECTIVE DATE<br>See Block 16C                             |  | 4. REQUISITION/PURCHASE REQ. NO.                    |  |
| 5. PROJECT NO. (If applicable)  |  | 6. ISSUED BY<br>SRRPOD   |  | 7. ADMINISTERED BY (If other than Item 6)<br>SRRPOD |  |
| 8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)<br>ICF INCORPORATED, L.L.C.<br>9300 LEE HIGHWAY<br>FAIRFAX VA 220316050 |  | 9A. AMENDMENT OF SOLICITATION NO.                              |  | 9B. DATED (SEE ITEM 11)                             |  |
| 9C. DATED (SEE ITEM 11)   |  | 10A. MODIFICATION OF CONTRACT/ORDER NO.<br>EP-W-10-056<br>0040 |  | 10B. DATED (SEE ITEM 13)<br>06/14/2011              |  |
| CODE 072648579  |  | FACILITY CODE  |  |   |  |

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

**12. ACCOUNTING AND APPROPRIATION DATA (If required)**

See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

|           |   |
|-----------|---|
| CHECK ONE | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.  |
| X         | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). |
| X         | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:<br>By Mutual Agreement of Parties  |
|           | D. OTHER (Specify type of modification and authority)   |

**E. IMPORTANT:** Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

DUNS Number: 072648579

The purpose of this bilateral modification is for the following:

- (1) To extend the period of performance at no additional cost to the Government;
- (2) To incorporate the revised Statement of Work (SOW) initially provided under modification no. 7 (3 pages);
- (3) To make administrative changes; and
- (4) To provide clarification of modification no. 7.

This task order end date is hereby changed from September 30, 2012 to February 22, 2013 based on the revised SOW.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

|   |                  |   |                  |
|---|------------------|---|------------------|
| 15A. NAME AND TITLE OF SIGNER (Type or print)                           |                  | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)<br>Rayna Brown |                  |
| 15B. CONTRACTOR/OFFEROR<br><br>(Signature of person authorized to sign) | 15C. DATE SIGNED | 16B. UNITED STATES OF AMERICA<br><br>(Signature of Contracting Officer)   | 16C. DATE SIGNED |



## CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED

EP-W-10-056/0040/008

PAGE OF

2

5

NAME OF OFFEROR OR CONTRACTOR

ICF INCORPORATED, L.L.C.

| ITEM NO.<br>(A) | SUPPLIES/SERVICES<br>(B)   | QUANTITY<br>(C) | UNIT<br>(D) | UNIT PRICE<br>(E) | AMOUNT<br>(F) |
|-----------------|--|-----------------|-------------|-------------------|---------------|
|                 | <p>The total task order ceiling remains unchanged at \$216,190.00.</p> <p>For clarification purposes, the changes contained herein are based on actions under modification no. 7 of this order. The proposal approved under modification no. 7 is based on the SOW incorporated herein.</p> <p>All other terms and conditions remains unchanged and in full effect.</p> <p>TOPO: Tiffany Kollar Max Expire Date: 02/22/2013</p> <p>LIST OF CHANGES:<br/>Reason for Modification : Other Administrative Action</p> <p>Period Of Performance End Date changed from 30-SEP-12 to 22-FEB-13</p> <p>Contracting Officer changed from Lynette Gallion to Rayna Brown</p> <p>Maximum Potential Expiration Date changed to : 02/22/2013</p> <p>Payment:<br/>RTP Finance Center<br/>US Environmental Protection Agency<br/>RTP-Finance Center<br/>Mail Drop D143-02<br/>109 TW Alexander Drive<br/>Durham NC 27711</p> <p>Period of Performance: 06/14/2011 to 02/22/2013</p> |                 |             |                   |               |

## **Task Order Statement of Work Support for the Waste Reduction Model (WARM)**

### **BACKGROUND**

The Resource Conservation and Sustainability Division (RCSD) was formed within the EPA's Office of Resource Conservation and Recovery to implement the national MSW strategy "The Solid Waste Dilemma: An Agenda for Action." RCSD is responsible for fostering integrated waste management (including waste prevention and recycling), developing State program approval procedures, assessing the status of State programs, and ensuring successful implementation of the entire MSW Program nationwide, in support of RCRA Subtitle D implementation.

To facilitate these activities,

Materials that enter the waste stream have energy impacts (and associated GHG emissions) at each stage of their life cycle. These life cycle stages include:

- acquisition of raw materials,
- processing raw materials,
- manufacture of products from processed materials,
- product use by consumers, and
- product disposal.

Waste reduction practices, such as recycling and reuse, reduce the demand for raw material and energy inputs to the manufacturing stage of the life cycle, thereby conserving energy and reducing GHG emissions. The energy savings and GHG emissions reductions associated with recycling are driven largely by the difference between manufacturing the material using virgin inputs and manufacturing the material using recycled inputs. Energy savings and GHG emissions reductions can also result from waste *disposal* practices, such as waste combustors and landfill gas to energy systems.

Since the energy implications of waste management practices for specific materials and products accrue throughout the life cycle, product-specific energy factors typically require a life-cycle analysis to quantify the benefits. The Waste Reduction Model (WARM) is an EPA tool that uses process energy and process non-energy GHG data from life cycle inventories to estimate the energy and GHG benefits of alternative waste disposal practices.

### **PURPOSE AND OBJECTIVES**

The purpose of this task order is to provide support to ORCR's effort to quantify and articulate the important link between energy efficiency/climate change and management of materials, through:

- Analysis of new life cycle data for materials already addressed in WARM,
- Generation of GHG emissions factors from those analyses,
- Analysis of life cycle data for materials not yet addressed in WARM,
- Generation of GHG emissions factors for those new materials,
- Maintenance of WARM (both model and documentation), and
- Providing stakeholder support as it relates to the other activities of this task order.

## **SCOPE OF WORK**

The Contractor shall have demonstrated experience and expertise in the development and use of WARM and related tools (ReCon, iWARM); in sources, production and use of life cycle inventory data; and outreach and communication with users of WARM.

The work to be completed and the schedule of deliverables are included in the tasks and subtasks detailed below.

### **TASK 1. PROGRAM SPECIFIC SUPPORT - ORCR HEADQUARTERS (Task 1 of Contract-level SOW)**

The Contractor shall provide technical assistance to the Agency's program to promote the reduction, reuse and recycling of waste through maintenance and enhancement of the Waste Reduction Model (WARM). WARM uses process energy and process non-energy GHG data from life cycle inventories to estimate the energy and GHG benefits of alternative waste disposal practices. The Contractor shall update WARM with new and/or updated material-specific LCI data for organics and landfill modeling numbers.

Review of the organics LCI data was initiated under a previous contract (EPA Contract No. EP-W-07-003, WA 3-64). A workshop was held in 2009 where experts from the field were brought in to discuss how WARM can better represent the benefits of composting, the Contractor will complete the data review, and generate emissions factors suitable for use in WARM.

Review of the landfill modeling numbers that WARM relies upon. In October 2011, we received a stakeholder request to review our landfill emissions factors and compare them with our combustion emission factors. This work is already underway and will continue into 2012.

The Contractor will update WARM and the WARM documentation with the revised emissions factors.

The Contractor will prepare the annual WARM update to various factors in the model using current data sources: statistics on the carbon content of fuels, landfill methane generation distribution (by type of landfill), landfill gas recovery and flaring rates, and the non-biogenic carbon content of mixed MSW.

One update of WARM will be released, incorporating the new/revised emissions factors for organics, the updated factors for composting, combustion and landfilling. Updated documentation will be posted simultaneously with the release of the updated model. The update is targeted for late September, 2012.

| <b>DELIVERABLES</b>  | <b>DUE DATES</b>                |
|--|---------------------------------|
| Revised Emissions Factors for Organics                                       | February 1, 2013                |
| Revised Calculations, Factors and/or Numbers for Composting                  | February 1, 2013                |
| Revised Calculations, Factors and/or Numbers for Combustion and/or Landfills | February 1, 2013                |
| Revised WARM documentation, incorporating new Emissions Factors              | February 13, 2013               |
| Update of WARM to Internet   | February 22, 2013               |
| Posting updated WARM documentation to Internet                               | No later than February 22, 2013 |

## **TASK 2. COMMUNICATIONS AND OUTREACH SUPPORT**

**(Task 3 of Contract-level SOW)**

The Contractor shall provide communications and outreach support to stakeholders on use of WARM and interpretation of results. These stakeholder contacts will be forwarded to the Contractor by the TOCOR or her designee, and will include e-mail and telephone requests. In addition, the contractor shall (at the request of the EPA TOCOR or her designee) provide support to EPA staff in proper application of WARM.

As part of this task, Contractor shall provide any necessary updates to tool and website as needed. Current website is transitioning from EPA's old web format to a new microsite. Contracts will support this transition and any necessary content changes that will be part of this.

Each monthly progress report shall list the stakeholder support provided that month, including name, topic, and answer provided.

For the purposes of cost estimation, assume that 24 stakeholder/staff requests are sent to the Contractor for support.

| <b>DELIVERABLES</b>   | <b>DUE DATES</b>  |
|---|-------------------|
| Revised content and web structure for EPA transition to microsite | February 22, 2013 |
| Monthly report including name, topic, and answer provided.        | Monthly           |

|   |  |   |  |  |  |
|---|--|---|--|--|--|
| <b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>   |  | 1. CONTRACT ID CODE   |  | PAGE OF PAGES<br>1   2   |  |
| 2. AMENDMENT/MODIFICATION NO.<br>009  |  | 3. EFFECTIVE DATE<br>See Block 16C  |  | 4. REQUISITION/PURCHASE REQ. NO.                               |  |
| 5. PROJECT NO. (If applicable)  |  | 6. ISSUED BY<br>SRRPOD<br>US Environmental Protection Agency<br>Superfund/RCRA Regional Procurement<br>Operations<br>1200 Pennsylvania Ave, NW<br>Washington DC 20460 |  | 7. ADMINISTERED BY (If other than Item 6)<br>CODE              |  |
| 8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)<br>ICF INCORPORATED, L.L.C.<br>9300 LEE HIGHWAY<br>FAIRFAX VA 220316050 |  | (x)   |  | 9A. AMENDMENT OF SOLICITATION NO.                              |  |
| CODE 072648579  |  | FACILITY CODE   |  | 9B. DATED (SEE ITEM 11)  |  |
|   |  | X   |  | 10A. MODIFICATION OF CONTRACT/ORDER NO.<br>EP-W-10-056<br>0040 |  |
|   |  |   |  | 10B. DATED (SEE ITEM 13)<br>06/14/2011                         |  |

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

**12. ACCOUNTING AND APPROPRIATION DATA (If required)**

See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

|           |   |
|-----------|---|
| CHECK ONE | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.  |
|           | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). |
| X         | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:<br>By Mutual Agreement of Parties  |
|           | D. OTHER (Specify type of modification and authority)   |

**E. IMPORTANT:** Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

DUNS Number: 072648579

TOPO: Tiffany Kollar Max Expire Date: 04/30/2013

The purpose of this no-cost bilateral agreement is to:

- 1) Extend the period of performance; and
- 2) Incorporate changes to the deliverable schedule (see below)

All other terms and conditions remain unchanged.

**LIST OF CHANGES:**

Reason for Modification : Supplemental Agreement for work within scope

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

|   |                  |   |                  |
|---|------------------|---|------------------|
| 15A. NAME AND TITLE OF SIGNER (Type or print)                           |                  | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)<br>Rayna Brown |                  |
| 15B. CONTRACTOR/OFFEROR<br><br>(Signature of person authorized to sign) | 15C. DATE SIGNED | 16B. UNITED STATES OF AMERICA<br><br>(Signature of Contracting Officer)   | 16C. DATE SIGNED |

## CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED

EP-W-10-056/0040/009

PAGE

OF

2

2

NAME OF OFFEROR OR CONTRACTOR

ICF INCORPORATED, L.L.C.

| ITEM NO.<br>(A) | SUPPLIES/SERVICES<br>(B)   | QUANTITY<br>(C) | UNIT<br>(D) | UNIT PRICE<br>(E) | AMOUNT<br>(F) |
|-----------------|--|-----------------|-------------|-------------------|---------------|
|                 | <p>Period Of Performance End Date changed from<br/>22-FEB-13 to 30-APR-13<br/>Maximum Potential Expiration Date changed to :<br/>04/30/2013</p> <p>Revised Deliverable Schedule</p> <p>TASK 1. PROGRAM SPECIFIC SUPPORT - ORCR<br/>HEADQUARTERS</p> <p>DELIVERABLES DUE DATES:<br/>Revised Emissions Factors for Organics: APRIL 1,<br/>2013</p> <p>Revised Calculations, Factors and/or Numbers for<br/>Composting: APRIL 19, 2013*</p> <p>Revised Calculations, Factors and/or Numbers for<br/>Combustion and/or Landfills: APRIL 19, 2013</p> <p>Revised WARM documentation, incorporating new<br/>Emissions Factors: APRIL 30,2013</p> <p>*As it relates to the food emission factors not<br/>related to the secondary work of updated<br/>composting numbers</p> <p>Payment:<br/>RTP Finance Center<br/>US Environmental Protection Agency<br/>RTP-Finance Center<br/>Mail Drop D143-02<br/>109 TW Alexander Drive<br/>Durham NC 27711</p> <p>Period of Performance: 06/14/2011 to 04/30/2013</p> |                 |             |                   |               |

|   |  |   |  |  |  |
|---|--|---|--|--|--|
| <b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>   |  | 1. CONTRACT ID CODE   |  | PAGE OF PAGES<br>1   2   |  |
| 2. AMENDMENT/MODIFICATION NO.<br>010  |  | 3. EFFECTIVE DATE<br>See Block 16C  |  | 4. REQUISITION/PURCHASE REQ. NO.                               |  |
| 5. PROJECT NO. (If applicable)  |  | 6. ISSUED BY<br>SRRPOD<br>US Environmental Protection Agency<br>Superfund/RCRA Regional Procurement<br>Operations<br>1200 Pennsylvania Ave, NW<br>Washington DC 20460 |  | 7. ADMINISTERED BY (If other than Item 6)<br>CODE              |  |
| 8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)<br>ICF INCORPORATED, L.L.C.<br>9300 LEE HIGHWAY<br>FAIRFAX VA 220316050 |  | (x)   |  | 9A. AMENDMENT OF SOLICITATION NO.                              |  |
|   |  |   |  | 9B. DATED (SEE ITEM 11)  |  |
|   |  | x   |  | 10A. MODIFICATION OF CONTRACT/ORDER NO.<br>EP-W-10-056<br>0040 |  |
|   |  |   |  | 10B. DATED (SEE ITEM 13)<br>06/14/2011                         |  |
| CODE 072648579  |  | FACILITY CODE   |  |  |  |

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.  
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

**12. ACCOUNTING AND APPROPRIATION DATA (If required)**

See Schedule

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

|           |   |
|-----------|---|
| CHECK ONE | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.  |
|           | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). |
| X         | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:<br>By Mutual Agreement of the Parties  |
|           | D. OTHER (Specify type of modification and authority)   |

**E. IMPORTANT:** Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

DUNS Number: 072648579

Task Order Title: Support for the Waste Reduction Model (WARM)

The purpose of this no-cost bilateral modification is to:

- (1) Change the period of performance end date and
- (2) Incorporate changes to the deliverable schedule.

In consideration for excusable delays, the period of performance end date is hereby changed to May 31, 2013 and the deliverable schedule is modified as specified below at no additional cost to the Government.

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

|   |                  |   |                  |
|---|------------------|---|------------------|
| 15A. NAME AND TITLE OF SIGNER (Type or print)                           |                  | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)<br>Rayna Brown |                  |
| 15B. CONTRACTOR/OFFEROR<br><br>(Signature of person authorized to sign) | 15C. DATE SIGNED | 16B. UNITED STATES OF AMERICA<br><br>(Signature of Contracting Officer)   | 16C. DATE SIGNED |

## CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED  
EP-W-10-056/0040/010PAGE OF  
2 2NAME OF OFFEROR OR CONTRACTOR  
ICF INCORPORATED, L.L.C.

| ITEM NO.<br>(A) | SUPPLIES/SERVICES<br>(B)  | QUANTITY<br>(C) | UNIT<br>(D) | UNIT PRICE<br>(E) | AMOUNT<br>(F) |
|-----------------|---|-----------------|-------------|-------------------|---------------|
|                 | <p>Revised Deliverable Schedule (only changes those deliverables specified herein):</p> <p>Revised Calculations, Factors and/or Numbers for Combustion and/or Landfills is due May 20, 2013</p> <p>Revised WARM documentation, incorporating new Emission Factors is due May 31, 2013</p> <p>This is a non-severable task order.</p> <p>All other terms and conditions remains unchanged and in full force and effect.</p> <p>TOPO: Tiffany Kollar Max Expire Date: 05/31/2013</p> <p>LIST OF CHANGES:</p> <p>Reason for Modification: Supplemental Agreement for work within scope</p> <p>Period Of Performance End Date changed from 2013-04-30 to 2013-05-31</p> <p>Maximum Potential Expiration Date changed to: 05/31/2013</p> <p>Payment:</p> <p>RTP Finance Center<br/>US Environmental Protection Agency<br/>RTP-Finance Center<br/>Mail Drop D143-02<br/>109 TW Alexander Drive<br/>Durham NC 27711</p> <p>Period of Performance: 06/14/2011 to 05/31/2013</p> |                 |             |                   |               |